



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

a great mass of information, not only useful to the people of Wisconsin, but also of interest to geologists in general. It embraces chapters on the general geology of the Lake Superior region, by R. D. Irving; on the lithology of the Keweenaw or copper-bearing system, by R. Pumpelly; on the geology of the Eastern Lake Superior district, by R. D. Irving; on the Huronian series, west of Penokee gap, by C. E. Wright; on the geology of the Western Lake Superior district, by E. T. Sweet; on the geology of the Upper St. Croix district, based on the notes of the late Moses Strong, and edited by T. C. Chamberlain; on the geology of the Menominee region, by T. B. Brooks; and lastly on the geology of the Menominee Iron region. The volume is noteworthy from the valuable contributions to lithology, illustrated by numerous colored plates, and to the mining interests of the State, *i. e.*, the Huronian iron-bearing and the Keweenaw or copper-bearing rocks, these portions being well illustrated by maps.

MR. KINGSLEY ON THE CRUSTACEA BELONGING TO UNION COLLEGE¹.—In this paper 103 species are noticed, two new genera (*Eupilumnus* and *Concordia*) are described, the genus *Heteractæa* of Lockington is recharacterized, and the name *Miersia* is proposed for *Ephyra*. The new species described are *Actæa spinifera*, *Eupilumnus websteri*, *Lithadia lacunosa*, *Pisosoma glabra*, *Concordia gibberosus*, *Alpheus websteri*, *A. packardii*, *Ozyris alpheo-rostris* and *Pontonia unidens*. On the plate which accompanies the article, nine species are figured, seven of which belong to the genera *Pisosoma*, *Eupilumnus*, *Eucramus*, *Concordia*, *Thor*, *Ozyris* and *Tozeuma*, representations of which have never before been illustrated. All known genera of the Caridea of Dana are briefly characterized.

CROSBY'S GEOLOGY OF EASTERN MASSACHUSETTS.²—The Boston Society of Natural History, besides its Memoirs and Proceedings, has undertaken the publication of volumes entitled "Occasional Papers." The first was the Correspondence of Dr. Harris, the Entomologist; the second, Hentz's Spiders of the United States, and now it gives us the results of five years labor by Mr. Crosby, as assistant in the Museum, on the crystalline and primordial rocks of Eastern Massachusetts, a subject of high interest and of a good deal of difficulty. The introduction gives a general sketch of the topography and geographical features of that part of New England surrounding the Gulf of Maine. The result of the author's labors

¹ On a collection of Crustacea from Virginia, North Carolina and Florida, with a revision of the genera of *Caryonidæ* and *Palæmonidæ*.—Proc. Acad. Nat. Sci. Phila. 1879. pp. 383-427.

² Occasional Papers of the Boston Society of Natural History. III. Contributions to the Geology of Eastern Massachusetts. By WILLIAM O. CROSBY, Boston, 1880. Published by the Society. \$3.00. 8vo, pp. 286, with an atlas and five plates of sections, &c.

is to bring out at least much more clearly than has before been done, the fact that between the crystalline and the oldest primordial rocks, "there is a great chronologic break, a 'lost interval' of immense duration," and also that the geological formations are oldest on the sea-board, becoming successively newer as we proceed from Massachusetts bay to the Berkshire hills in the western part of the State. Bearing these two points in mind, the volume will be read with much interest, afford food for further discussion, and doubtless will lead local geologists to a more careful study of their neighborhood. The region here treated of is most difficult to study and understand; a flood of light has been thrown upon the subject by Mr. Crosby, and many facts which will be of constant use in future discussions are here recorded. The map especially is an excellent graphic résumé of the subject. It is not often the case that a city society does so much as the one at Boston to promote the study of local geology, in this respect it has set a most useful example to similar organizations.

BROOKS'S DEVELOPMENT OF THE OYSTER.¹—This is the first attempt to scientifically examine our oyster, its breeding habits and mode of development; the result is a valuable addition to our knowledge of the American oyster, and a fresh discussion of the embryology of mollusks. Dr. Brooks shows that our species, like the European, is bisexual during the breeding season, and that the general mode of development, is like that sketched out by Lovén in his studies of the development of *Cardium*, a bivalve mollusk.

Unlike the European species, the eggs of the American oyster undergo development in the open sea, not within the shell. The process of segmentation is remarkable for its great rapidity, for the bilateral symmetry of the germ at this period, and for the well marked alternation of periods of activity with periods of rest. The ciliated germ is formed in some cases within two hours after fertilization, but twenty-four hours is the usual time, and it may sometimes require two days to reach it. There is an invaginate gastrula state, the primitive opening (blastopore) closing completely, the shell appearing at the point which the blastopore previously occupied, while directly opposite the position of the blastopore, the mouth and then the anus of the digestive tract make their appearance. The Veliger has the general form of that of *Cardium* and other Lamellibranchs.

Dr. Brooks thinks that the embryology of the oyster bears out his view that Lamellibranchs must be regarded as a side branch from the main molluscan stem, of which the Gasteropods are a much more direct continuation, "and that all attempts to trace the phylogeny of the higher Mollusca through the Lamellibranchs to

¹ *Johns Hopkins University, Baltimore. Studies from the Biological Laboratory, The Development of the Oyster.* By W. K. Brooks. No IV. Baltimore, 1880. 8vo. pp. 84. 11 plates.